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Public policies toward private pensions in Canada and the United States share a common history and many current issues. Policymakers and analysts in both countries view the retirement income program as a “three-legged stool,” with base incomes established by public pensions, supplemented by private pension benefits and individual retirement saving. Canada and the United States provide similar tax incentives for private pension saving, and both countries have regulations for vesting, funding, and fiduciary behavior designed to enforce and preserve private sector pension promises.

Although basic private pension policies are similar, there are important differences. Both countries limit tax-deductible contributions and benefits, but the ceilings established by Revenue Canada are considerably lower than those in the United States (although the difference has shrunk over the past decade). Another significant difference is the greater role for personal retirement accounts. Canadian Registered Retirement Savings Plans (RRSPs) have a longer history and enjoy more favorable tax treatment than do Individual Retirement Accounts (IRAs) in the United States. An important tax distinction is the greater responsibility placed upon actuaries by Revenue Canada to determine minimum and tax-deductible contributions to defined-benefit funds in Canada. Internal Revenue Service rules, in contrast, disallow contributions sufficient to fully fund future benefit obligations in many plans.

The uniformity of pension regulations is another difference. Non-tax pension rules are primarily enforced at the federal level in the United States, whereas pension regulation is a provincial responsibility

in Canada. The result is that it is difficult to compare pension regulations in the United States with rules that differ between provinces in Canada. Vesting rules, for example, vary between British Columbia and Ontario. Also, only Ontario has mandatory pension insurance, whereas all defined-benefit pension sponsors in the United States are covered by the Pension Benefit Guaranty Corporation.

Canada and the United States share several current public policy issues. One of the most important is the increasing tension between policy goals of encouraging expansion of pension coverage and funding, and of minimizing revenue loss of preferential treatment of pension compensation. Both federal governments in recent years have established minimum funding requirements, but they also have developed regulations to discourage "overfunding" as a pure tax shelter. There also is concern in both countries that increasing regulation will continue to lead to the decline of defined-benefit pension coverage and its attendant advantages over the defined-contribution approach. One of the biggest public policy differences appeared in response to the inflation of the 1970s and early 1980s. The protection of pension benefits during an inflationary environment was the most keenly debated public policy issue in Canada. In the United States, in contrast, inflation protection drew very little attention. Public policy in the United States has been focused primarily on declining coverage, portability, and the effect of the pension tax preferences on the distribution of the tax burden.

This chapter compares public policies towards private pensions in Canada and the United States and examines relevant policy research from both countries. First, I review the evolution of private pensions and policies in each country. Although pension policies are similar, Canada (especially the province of Ontario) has tended to involve government in the private pension system earlier than the United States. Next, I describe and compare the most important pension tax and regulatory rules. In the remainder of the paper, I examine four common current public policy issues: coverage, portability, tax policy, and inflation indexing. The emphasis of this discussion is a review of relevant research on Canadian and U.S. outcomes. The volume of pension research has increased dramatically over the past two decades and, although most studies have focused on the United States, pension

research in Canada has made important contributions, especially on the issue of mandatory inflation indexing.

The motivation for a joint discussion of private pension issues is that a comparison of research may shed light on pension outcomes and policy impacts in both countries. The similarities in pension systems suggest that outcomes of research in one country will be applicable to the other. Further, when possible, I try to identify differences in policies and institutions that provide an opportunity for comparative analysis. For example, a major issue in the United States is the decline in coverage rates. A review of Canadian coverage experience may inform the extent to which this decline reflects policy changes or changes in employment composition. Similarly, the continued popularity of defined-benefit pensions in Canada may suggest reasons why defined-benefit coverage has declined in the United States. This issue also is relevant in Canada, where many pension analysts are concerned that regulations will result in similar trends there.

EVOLUTION OF PENSION POLICY IN CANADA AND THE UNITED STATES

Retirement programs and tax and regulatory policies towards private pensions have a similar history in the United States and Canada. Both countries adopted universal public pension plans, extended favorable tax treatment to encourage expansion of private pensions, and later enacted broad regulations on pension outcomes. There have been important differences, however, in the evolution of private pension policies.

The first employer-sponsored pension in Canada was introduced by the Grand Trunk Railway in 1874, followed a year later by the first formal pension plan in the United States, sponsored by the American Express Company. Although employment shifts from agriculture into manufacturing created new pressures for explicit retirement saving vehicles, pension coverage grew slowly in both countries before 1910.¹ The first legislation in either country to encourage retirement savings was the Government Annuities Act of 1908, which authorized the

Canadian federal government to sell annuities to the public at favorable rates.

The period between 1910 and 1930 saw the widespread adoption of pension plans by the largest employers in the United States and Canada. Graebner (1980) attributed much of the early growth to management's view that pensions could reduce labor costs by lowering turnover and encouraging early retirement. The introduction of income tax systems during this period also provided a stimulus to coverage in both countries. The favorable tax treatment of pension contributions and earnings that continues to this day was put in place quickly in the United States. Payments to fund current retirement benefits were recognized as legitimate business deductions at the outset of the corporate income tax. The Revenue Acts of 1921 and 1926 explicitly exempted the earnings of assets in retirement funds from taxation, and the Revenue Act of 1928 allowed pension sponsors to deduct contributions to advance fund benefit accruals.

Employer contributions also were immediately exempted from the Canadian corporate income tax. In addition, the 1919 Income Tax War Act extended the exemption to employee contributions to pension funds.

Rapid growth in pension plans and compensation during World War II created fears that pensions were increasingly being adopted for the purpose of avoiding income taxation. In the United States, the result was the enactment of the first contribution limits in the Revenue Act of 1942. This legislation also established the first nondiscrimination rules to prevent the adoption of pensions for the primary benefit of high-wage employees. Employer contribution limits were first imposed in Canada in 1947. Because tax-qualified plan limits on contributions and benefits in Canada have been strict, Canada has not felt it necessary to adopt nondiscrimination rules.

A significant difference between tax policies is the more favorable treatment of individual contributions to retirement funds in Canada than in the United States. In addition to exempting employee contributions from taxation, Canada established personal retirement accounts in 1957. Canadian workers were allowed to make tax deductible contributions to RRSPs even if they were covered by a private pension plan. In the United States, IRAs were not generally available until 1981 and were strictly limited after 1986.

The existence and generosity of public pension benefits is an important factor in private pension coverage. Canada first enacted public pensions legislation in 1927. The Old Age Pension Act provided federal assistance to provinces that delivered means-tested pensions to the elderly. By 1951, the view that means-tested pensions were inadequate was widespread, and the Old Age Security Acts authorized a flat, universal retirement benefit. Canada did not adopt a universal, earnings-related public pension until the Canada/Quebec Pensions Plans in 1965. The Canadian incremental approach is in contrast to the United States Social Security program, which has been earnings-based since 1938.

Prior to the 1960s, private pension regulation was vested in each country's federal income tax codes, which established conditions for tax-qualified pension plans. The first important private pension regulations were approved in Ontario in 1963, establishing minimum vesting rules, funding requirements and, most notably, requiring all employers of more than 15 workers to provide pension coverage. Mandatory coverage was dropped with the revised Ontario Pension Benefits Act in 1965. However, the vesting standard of 45 years of age and 10 years of service was preserved. Most of the provinces subsequently adopted the major provisions of the Pension Benefits Act.

Significant pension regulation was not enacted in the United States for another decade. The Employees' Retirement Income Security Act of 1974 (ERISA) was more ambitious than the Pension Benefits Act. ERISA established standards for vesting, funding, and fiduciary behavior, as well as establishing a system of mandatory insurance for private sector, defined-benefit plans. Ontario is the only province in Canada that has mandatory pension insurance.

Several important changes in pension law were implemented in Canada during the 1980s. In the late 1970s, interest in private pension policy grew, as the ability of the public pension system to provide adequate income support for the elderly came into question. A number of government and private sector commissions issued reports containing various proposals for comprehensive pension policy reforms related to issues of coverage, vesting, tax treatment, and inflation indexing. This discussion has been referred to as the "Great Pension Debate," and it contributed to the passage of the Ontario Pension Benefits Act of 1987. This act reduced the minimum vesting period, required that vested ben-

efits be locked in, and created options for transferability of benefits under defined-benefit plans. All other provinces have adopted similar regulatory legislation. A major change in the taxation of pension contributions was enacted in 1990, when the concept of integrated overall limits for contributions to defined-benefit plans, money purchase plans, and RRSPs was introduced.

Changes in pension policy were less extensive in the United States. The President's Commission on Pension Policy (1981) called for mandatory pensions and improvements in portability. This report was largely ignored, however, and there was no explicit national debate, as compared with Canada, on the adequacy of retirement income. Pension tax preferences, instead, were reduced in a piecemeal fashion. Contribution limits were lowered several times, most recently in 1993, and a controversial funding limit was adopted in 1987. In addition to lowering benefit limits, nondiscrimination rules also were tightened. The primary motivation for increased taxation of pensions was enhancing federal tax revenue, and the preference of Congress for broadening the tax base over raising marginal income tax rates. Critics of these changes warned, however, that their cumulative effect would be greater complexity and reduced attractiveness of pensions, especially defined-benefit plans.

PUBLIC POLICIES TOWARDS PENSIONS IN CANADA AND THE UNITED STATES

Among industrialized nations, Canadian and U.S. pension policies are perhaps the most uniform. Tax rules and vesting and funding regulations are broadly similar. There are important distinctions, however. Most notable are the integrated contribution limits that allow for greater individual retirement savings in Canada than in the United States and the provincial system of pension regulation, which allows for differences in nontax pension rules within Canada.

Taxes and Coverage

Tax codes in Canada and the United States both permit deductions of employer contributions to pension funds from current income and do not tax pension fund earnings until benefits are distributed. Favorable tax rules clearly have been a stimulus to the growth of pension coverage and assets. There is a tension in both countries, however, between the policy goals of encouraging retirement saving and limiting revenue losses. Therefore, both countries have ceilings on benefits that can be provided under preferential tax status.

In the United States, defined-benefit plans cannot provide participants with more than the lesser of 100 percent of the highest three-year average earnings or \$115,641 (in 1993). In addition, there is an overall limit on annual compensation that can be used for benefit determinations. The compensation limit was lowered from \$235,840 to \$150,000 in the 1993 Omnibus Budget Reconciliation Act. Contributions to pension funds in excess of these limits are not deductible. Allowable contributions to defined-contribution plans may not exceed 25 percent of an employee's compensation or \$30,000.

The contributions and benefit ceilings are lower in Canada. Under rules adopted in 1990, the old system of separate limits for defined-benefit plans, defined-contribution plans, and RRSPs was replaced by an overall contribution limit of 18 percent of earnings up to Can\$15,500. This figure was designed to correspond to a maximum annual benefit of just over Can\$60,000 per year and allowable compensation of Can\$86,000 (Horner and Poddar 1992). An implied contribution amount is determined for workers who participate in a defined-benefit plan. The total of this amount plus contributions to the defined-contribution pension could not exceed the 18 percent/Can\$15,500 ceiling. (In 1995, the budget plan announced reductions in maximum contributions.) The idea is to apply uniform ceilings to workers, regardless of the type of plan provided by their employer.

Both countries also limit employer contributions to fund benefits. The Internal Revenue Code allows a deduction for the "normal cost" plus amortization of any prior unfunded liabilities. However, contributions to plans having assets equal to or above 150 percent of current liabilities are not deductible.² Further, the tax code limits the range of actuarial assumptions that may be used to calculate pension liabilities.

Thus, sponsors cannot avoid the 150 percent funding limit by adopting a low discount rate.

Revenue Canada, in contrast, relies more heavily on the judgment of professional actuaries in determining deductible pension contributions. In Ontario, the Pension Commission of Ontario requires defined-benefit plans to be evaluated by a pension actuary every three years. The actuary's determination of the required contribution for full funding is used by Revenue Canada to determine allowable deductions. Contributions to pension funds determined to be overfunded are disallowed in Canada, as they are in the United States. It appears, however, that the two countries apply different definitions of "fully funded." Canadian actuaries are permitted to take into account future salary increases as well as possible postretirement benefit increases; that is, contributions are allowed to fully fund currently accrued benefits. The full-funding limit in the United States, in contrast, applies to current or termination liabilities, which can be substantially less than ongoing obligations in periods of significant inflation.

Employee contributions in Canada are also generally exempt from taxation as current income. In the United States, employee contributions are deductible only in special 401(k) plans.³ A more important difference is the greater ability of Canadians to contribute to personal retirement accounts. The overall contribution limit of 18 percent or \$15,500 also applies to RRSPs. Workers not covered by an occupational pension plans may contribute up to this limit to their RRSP; allowable contributions, however, are reduced dollar-for-dollar by implied contributions to defined-benefit or money-purchase plans on the employee's behalf. Contributions to RRSPs have grown rapidly over the past decade. The proportion of tax filers who made RRSP contributions rose from 13.8 percent in 1982 to 24.2 percent in 1991 (Statistics Canada 1992).

Individual Retirement Accounts were established by ERISA in 1974 for workers not covered by an employer-sponsored pension, but American workers who were pension participants could not contribute to a personal retirement account until 1981. Like Canadian RRSPs, IRAs are nonforfeitable, fully portable retirement funds. The Economic Recovery Tax Act allowed all workers to make tax-deductible contribution to IRAs. However, the Tax Reform Act of 1986 put limits on contributions of workers who were otherwise covered by a pension.

A married couple with adjusted gross income above \$50,000 cannot make tax-deductible contributions to an IRA.⁴

The most rapidly growing pension vehicle in the United States is the 401(k) plan. Authorized by Congress in 1978, 401(k) plans allow employees the option of making tax-deductible contributions to a qualified profit-sharing or stock bonus plan. Typically, the employer matches voluntary employee contributions up to a percentage limit. The maximum employee 401(k) contribution is \$8,994 in 1993; otherwise, 401(k) plans are subject to the same rules as other defined-contribution plans.

In summary, contribution limits to tax-qualified pension funds are stricter in Canada. Canadian workers, whether or not covered by an occupational pension plan, however, have a greater ability to make tax-favored contributions to personal retirement accounts.

Vesting and Portability

Although personal retirement accounts are more important in Canada than in the United States, pension wealth overall may be less portable in Canada due to the dominance of defined-benefit plans. About one-third of all private pension assets in Canada reside in RRSPs or money-purchase plans (Statistics Canada 1992). In the United States, however, defined-contribution plans have grown rapidly and now hold nearly 40 percent of pension assets (Turner and Beller 1992).

Portability of benefits has emerged as a major pension issue in both countries, with much of the focus on early vesting. In 1987, the Ontario Pension Benefits Act and the federal Pension Benefits Standards Act established vesting after two years of service, and five other provinces have since adopted this standard. Three provinces have a five-year requirement, and Newfoundland applies the "10 and 45" rule. In the United States, all defined-benefit sponsors are subject to the same vesting rules, which generally require vesting after five years.

The Ontario Pension Benefits Act also enhanced portability of vested defined benefits. Upon termination, the vested worker may have the present value of his pension benefit transferred into another plan or into a Registered Retirement Savings Plan. Generally, workers do not have similar access to lump-sum benefits in the United States. As I discuss in the next section, however, preserving the value of defined bene-

fits depends less upon the portability of assets than upon the interest rate used to calculate the termination value, and neither country requires that distributions index for preretirement wage growth.

Portability outcomes also are a function of policies that encourage personal retirement accounts or defined-contribution plans. Tax policy in Canada is more favorable to RRSPs, but many analysts have argued that tax and regulatory changes over the past decade are responsible for the shift towards defined-contribution pensions (Clark and McDermid 1990). An indirect, and perhaps intended, effect of these policies has been to make pension benefits more portable.

PUBLIC POLICY ISSUES IN CANADA AND THE UNITED STATES

In this review I examine four public policy issues towards private pensions that have been prominent in the United States and Canada. The two countries share concerns about coverage, portability and preservation of benefits, the role of tax policy in promoting pensions, and inflation protection. My primary objective is to identify and briefly review relevant pension research from both countries. Most of the empirical research on private pensions has focused on outcomes in the United States. A number of studies, however, on the Canadian system have relevance for policy debates in the United States. In addition, there may be opportunities for comparative analysis, which exploits the different experiences of Canada and the United States, to improve our understanding of the private pension system and the effects of tax and regulatory policies in both countries. For example, research on trends in pension coverage in the United States generally uses time series methodology to evaluate the impacts of institutional, demographic, and public policy changes. Since Canadian policies and coverage outcomes have been different, however, a comparative analysis should be useful.

The discussion is organized around four policy issues: private sector coverage, portability and preservation of benefits, pension tax policy, and inflation indexing. I present an overview of the issue first, describing recent or proposed policy changes in each country. A brief

review of relevant policy research is presented next. Finally, I discuss some implications of cross-national comparisons and make some suggestions for further comparative policy research.

Pension Coverage

The most fundamental policy debates in both countries center on the level of coverage. Governments in both countries historically have promoted private sector pensions with favorable tax policy. Despite these incentives, the expansion of coverage begun after World War II has stalled, with cross-section coverage rates less than 50 percent in both workforces.⁵ The percentage of employed, private sector workers covered under an employer-sponsored pension plan is estimated to be 39 percent in Canada (Frenken and Maser 1992) and 42 percent in the United States (Beller and Lawrence 1992).⁶ Incomplete coverage was cited as the primary weakness of private pensions during the Canadian Great Pension Debate. According to Sayeed (1984, p. 59), "The most important issue in the debate on pension reform [in Canada] is whether coverage should be improved by an expansion of the public system or . . . of the private system." Most of the commission reports recommended expansion of private sector pension coverage, and one called for mandatory pensions.⁷

Private pensions in the United States also have been criticized for incomplete coverage. The President's Commission on Pension Policy (1981) recommended mandatory pension coverage, and a 1988 report of a Department of Labor advisory group also recommended consideration of, among other options, mandatory coverage. More recent critics of incomplete pension coverage have made different recommendations, arguing for repeal of pension tax preferences on the grounds that the beneficiaries of pensions and tax preferences are disproportionately high-income individuals (Munnell 1991, 1992; Gravelle 1993).

A particular concern in the United States has been the apparent decline in private pension coverage since the late 1970s. Table 1 shows coverage rates declining slightly between 1979 and 1988.⁸ However, these averages mask two significant trends: an increase in pension coverage for women and a decline for younger males. Even and Macpherson (1994) calculated that coverage rates for females rose by more than 6 percentage points between 1979 and 1988; whereas, over the same

Table 1 Pension Coverage Rates, Canada and the United States (%)

Year	United States		Canada
	Private sector	Civilian, public and private sector	Civilian, public and private sector
1979	43	46	
1982			46.5
1983	41	43	
1984			47.3
1986			46.0
1988	42	42	44.9
1990			44.8
1992			47.5

SOURCE. United States: estimates based on tabulations from May supplements to Current Populations Surveys by Beller and Lawrence (1992) for private sector and Piacentini (1989) for all civilian workers. Canada: *Statistics Canada* (1992).

period, the coverage rate fell 1.6 points for males between the ages of 35 and 55 and 6.6 points for males aged 21–35. Bloom and Freeman (1992) reported similar results.

Coverage rates in Canada appear to have been stable in comparison. Such a conclusion may be misleading, however. First, the source of time-series data on coverage rates in Canada is administrative data provided by plan sponsors, and coverage rate estimates from similar data in the United States also show stable private-sector coverage rates over the past decade, at about 46 percent (Beller and Lawrence 1992). Evidence for declining coverage rates in the United States has come from household surveys. A comparable trend might be found in Canada if household surveys were regularly repeated. Second, the stable coverage rates reported for Canada in Table 1 combine private and public sector employees. Unfortunately, an analysis of private sector coverage trends is not possible with Canadian data.⁹

More directly comparable are coverage rates for all civilians. Table 1 shows falling civilian coverage rates in the United States (see also Andrews 1985; Parsons 1991) relative to Canada. However, a given downward trend in private sector coverage would show less of an impact on civilian coverage rates in Canada because the proportion of

covered public sector workers is greater in Canada than it is in the United States.

Why Has Coverage Declined? Several studies have examined the decline in male coverage rates in the United States. The two most widely cited explanations are structural changes in the labor market, and changes in tax and pension policy. The first explanation argues that coverage declined because employment shifted to labor markets with traditionally low coverage rates: small, nonunion firms in service industries. Another possibility, however, is that coverage declined due to increased regulatory costs, reductions in marginal tax rates, and the introduction of pension plans in which employee participation is voluntary. The results of these studies are relevant to Canada. Although overall civilian coverage rates have not declined, common trends are at work. Coverage rates for Canadian men declined slightly, from 53.7 percent to 51.8 percent between 1982 and 1992, while the coverage rate for females was up about 6 percentage points. There also is concern that new Canadian pension regulations may reduce coverage (see discussion in Frenken and Maser 1992).

Investigations of declining coverage in the United States build upon cross-section studies of the determinants of pension coverage. These studies have consistently shown that the probability of having a pension is higher for individuals who are union members and are employed by large, manufacturing-based firms (Mitchell and Andrews 1981; Dorsey 1982; Even and Macpherson 1994; Parsons 1994). Although the determinants of pension coverage in Canada have received less attention, the cross-section pattern is similar to that of the United States (Frenken and Maser 1992; Smith and Meng 1991; Currie and Chaykowski 1993).

On the basis of these patterns, Bloom and Freeman (1992) and Even and Macpherson (1994) attributed most of the decline in pension coverage to shrinking union membership, manufacturing employment, and increases in the relative importance of small firms.

Cross-section estimates also suggest that earnings and marginal tax rates are important determinants of pension coverage in the United States (Alpert 1983; Long and Scott 1982; Woodbury and Bettinger 1991). Currie and Chaykowski (1993) and Smith and Meng (1991) found coverage to be strongly related to earnings for Canadian workers

as well. These results suggest that reduction in marginal tax rates during the 1980s may have lowered coverage rates in the United States. Bloom and Freeman argued that tax cuts could not explain the drop in coverage for younger, lower income workers because their tax rates declined the least. When the pension coverage decision is viewed in a lifetime context, however, tax cuts should have the greatest effect on younger workers. Older covered workers would have little incentive to drop pension coverage, but forward-looking younger workers would anticipate lower lifetime tax savings if the tax cuts were viewed as permanent.

Woodbury and Bettinger (1991) estimated that the decline in the tax price of pensions, due to reductions in marginal tax rates, explained about one-third of the drop in coverage between 1979 and 1988 and was nearly as important as declining union membership. Reagan and Turner (2000) attributed about one-fourth of the decline in coverage for young males to tax effects.

Even and Macpherson also argued that much of the fall in coverage for young males was due to the introduction of 401(k) plans, which allow workers to voluntarily participate. Their estimates indicated that the pension offer rate did not decline, but that the acceptance rate, given that a pension was in place, fell. Note that this theory also is consistent with the view that coverage fell due to an increased regulatory burden. Under this view, higher regulatory costs for defined-benefit plans induced employers to adopt 401(k) plans, indirectly leading to lower coverage rates.

This result is relevant for Canada, given the generous contribution limits for voluntary RRSPs. There is a corresponding concern that higher regulatory costs of defined-benefits will lead to substitution of voluntary pension coverage for defined-benefit plans (Hirst 1992), which could lead to similar reductions in coverage for young males in Canada.

A test of the 401(k) explanation for declining coverage would be a comparison of trends in coverage for young males in Canada and the United States. This theory predicts that coverage rates for young males should have declined less in Canada because RRSP limits were raised well after 401(k) plans were introduced. Unfortunately, there are no repeated household surveys that allow comparisons of coverage rates by age over time in Canada.

Another factor consistent with greater declines in coverage in the United States for all workers is the greater decline in unionization than in Canada.

Changes in Coverage Type. The structure of pension coverage also has changed dramatically in the United States. The percentage of covered workers who had a primary defined-benefit plan fell from 87 percent in 1975 to 68 percent in 1987. A similar decline has not been found in Canada: 94 percent of covered workers had a defined-benefit plan in 1982, as compared with 90 percent in 1992. Again, a time series on only private sector, defined-benefit coverage rates is not possible in Canada. But, given that about half of all covered workers are private sector employees, a decline in private sector, defined-benefit coverage similar to the United States would have lowered the overall defined benefit rate by more than 4 percentage points.

The shift in coverage type has become an important policy issue in the United States. Some analysts are concerned that the growth of defined-contribution plans will yield lower retirement incomes than defined-benefit plans, because savings rates are lower for defined-contribution plans and because of the likelihood that lump-sum distributions will be consumed before retirement (Paine 1993). Although defined-benefit coverage has not shrunk in Canada, some are concerned that pension and tax reforms, and especially the issue of the surplus in overfunded plans, may precipitate a similar movement toward defined-contribution plans.

The two main explanations for shifts in coverage are changes in the structure of employment and changes in sponsor preferences for defined-benefit plans. Studies of pension plan type in the United States have shown that defined-benefit plans are more common among large firms and in unionized, goods-producing industries (Dorsey 1987). Consistent with this, Gustman and Steinmeier (1992) estimated that over half of drop in defined-benefit coverage between 1977 and 1985 was due to shifts in the distribution of workers away from sectors that traditionally provide defined-benefit plans. Clark and McDermid (1990) found, in contrast, that only 21 percent of the decline in firms who offer defined-benefit plans is due to employment shifts. They attributed the remainder to changes in sponsor preferences and argued that changes in the tax and regulatory climate have been the primary

reason for these shifts. A study by Hay/Huggins (1990) estimated that administrative costs per worker increased 181 percent between 1981 and 1991, but only 99 percent for defined-contribution plans.

An analysis of plan choice in Canada could be instructive in evaluating the relative effects of public policy versus employment shifts. Two significant differences in Canadian trends are a smaller decline in unionization and, at least during the decade beginning in the late 1970s, a less dramatic increase in regulatory costs of defined-benefit plans.

Portability and Benefit Preservation

The primary reason for encouraging private pensions is to raise retirement income, but critics of private pensions point out that even workers who are covered frequently receive low benefits due to imperfect portability and consumption of pension assets before retirement. Canada and the United States both have recently adopted policies to enhance portability of benefits and to "lock in" pension assets. Standards for vesting have been raised to five years in the United States, and two years for most Canadian provinces. New legislation provides Canadian workers with greater portability of defined-benefit assets upon a job change, and vested benefits in Canada also are locked-in. Although lump-sum distributions are increasingly common in the United States, there is a 10 percent excise tax on assets not rolled over into an IRA.

Policy towards portability and benefit preservation raises several issues besides the ability of pensions to support retirement consumption. Equity concerns arise because workers who change jobs frequently reach retirement with smaller benefits than those who spend their entire career with a single employer. Thus, imperfect portability may lower retirement income of females and low-income workers relative to high-wage males. The effect of pensions on economic efficiency also is relevant. Pensions are sometimes criticized for tying workers to jobs, thereby restricting job changes when technology or product demands change.

Despite shorter vesting periods, benefit losses when changing jobs can still be significant. A Hay/Huggins study (1988) projected that 59 percent of covered workers would lose pension wealth in a job change

and that the average loss would be 23 percent of the benefits that would have been received if all years of service were credited to their final pension plan. The study estimated that immediate vesting would lower average portability losses by less than 1 percent. Most portability losses arise because very few plans in either country index the earnings of workers who separate from the firm before retirement. Thus, a worker who is continuously covered by a pension, but changes jobs frequently, receives a smaller benefit than a worker with the same years of service credited to one plan.

Several proposals have been made to further reduce portability losses (Turner 1993). Mandatory indexing of the earnings base, similar to public pensions, has been suggested in both countries. Such a policy would eliminate most portability losses but, of course, would raise the cost of funding benefits. Ozanne and Lindeman (1987) estimated that such a policy would increase annual defined-benefit costs between 6 and 28 percent. Alternatively, portability losses could be reduced by requiring employers to accept service credit earned on a previous pension. Clearly, this policy could substantially raise the cost of hiring workers who were covered by a pension on a previous job.

Munnell (1991) pointed out that enhanced portability of assets will not necessarily lower losses for workers who separate. If the present value of benefits is calculated with a nominal interest rate, the assets to be transferred do not reflect wage indexing, and the worker is no better off than if the credits were left with the original plan. In theory, pension losses from job change could be eliminated by requiring a preretirement distribution valued at a discount rate that assumes wage indexing. The Ontario Pension Benefits Act provides that the present value of the deferred pension may be transferred for an employee who has terminated, either to another plan or an RRSP. However, it is my understanding that the present value is calculated using a nominal interest rate. If so, this option would have little effect on benefit losses.

In contrast to recent changes in Canadian regulations, defined-benefit assets generally cannot be distributed prior to the retirement age in the United States. Sponsors may cash out job leavers with accrued benefits of less than \$3,500, however. The Tax Reform Act of 1986 required such lump sums to be calculated with the interest rate used by the Pension Benefit Guaranty Corporation. The PBGC rate is less than the market rate generally used to determine current pension liabilities,

and thus portability losses are lower. However, when larger distributions are permitted, sponsors may use a nominal interest rate.

Requiring sponsors to transfer pension assets of separated workers valued with a real interest rate in effect transforms the defined-benefit pension into a defined-contribution plan. A more direct policy to enhance portability is to encourage defined-contribution plans. Some analysts have argued that the increasing regulation of defined-benefit plans has been purposeful to encourage defined-contribution plans. Unfortunately, one consequence of the growth of defined-contribution plans in the United States has been increased consumption of pension assets before retirement.

Economic Effect of Enhanced Portability. The impact of policies to enhance benefit portability centers on two questions. Would greater portability increase retirement income? Second, would these policies have adverse effects on employee productivity?

Pesando's (1984a) discussion of pension reform proposals in Canada pointed out that economists and employee-benefit experts widely accept the view that higher pension costs must ultimately be borne by workers, either in the form of lower wages or less generous pensions. Whether retirement income rises on average depends upon whether workers understand that benefits are imperfectly portable. If workers are fully informed and the expected retirement benefit is consistent with their preferences, enhanced portability would lead to lower benefit generosity, and retirement income would not rise. But, if workers do not understand that job change lowers real benefits, the policy would lead to an increase in pension benefits but lower wages or other compensation.

Some have suggested that enhanced pension portability would create gains for workers who make frequent job changes at the expense of long-tenured employees, but Pesando pointed out that this would occur only if employers do not adjust the wage structure. If the reward for long tenure is intentional, perhaps to provide incentives for longevity, employers will respond by steepening the career wage profile.¹⁰ If so, the distributional effects will be minimized. No studies, however, have attempted to estimate employer and employee responses to policies to reduce pension benefit losses.

The second question is based upon the premise that potential portability losses reduce employee turnover. Several studies in the United States have shown that pension coverage is associated with lower quit and layoff rates (Mitchell 1982; Ippolito 1986; Even and Macpherson 1991; Gustman and Steinmeier 1993; Allen, Clark, and McDermid 1993). Fewer studies have focused on the determinants of job change in Canada, but a study by Osberg, Apostle, and Clairmont (1986) found that Canadian workers were less likely to change employers when initially covered under a pension plan.

The pension-quit relationship has different interpretations, however. Even and Macpherson (1991) found that workers with defined-contribution pension coverage, whose benefits generally are fully portable, also were less likely to change jobs. Gustman and Steinmeier attributed most of the lower job change associated with pensions to wage premiums, rather than the potential portability losses. Their results suggest that pensions are associated with an efficiency wage and that enhanced portability would not increase quit rates. In contrast, Allen, Clark, and McDermid (1993) ascribed the significant decline in quits and layoffs to backloaded pension benefits, independent of wages.

The question of how policies to enhance pension portability would affect labor-market efficiency has received much less attention. For some time, analysts have been concerned that nonportable pensions would make workers less mobile in the face of demand and technological shocks. From this perspective, policies to make pension benefits more portable would improve allocative efficiency in the labor market. In contrast, most recent labor-market analysis is based upon gains from durable employment relationships or implicit contracts. Under this perspective deferred compensation plays an important incentive role in encouraging firm-specific investments in workers or reducing job shirking, and enhanced portability could reduce labor-market efficiency by encouraging worker quits and the loss of firm-specific job rents.

I found very little direct evidence on the productivity effects of nonportable pensions (Dorsey 1995). However, there is substantial indirect evidence that pensions may raise worker productivity. Two recent studies have shown that pension coverage is strongly related to worker training (Dorsey and Macpherson 1997; Johnson 1996). In

addition, a number of empirical studies based upon a wide variety of data sets have established that pension coverage is associated with large wage premiums. To my knowledge, there also have been no studies of the effect of pensions on productivity in the Canadian workforce.

“Locking In.” Proposals to “lock in” pension assets have received closer attention in the United States with the growth of defined-contribution plans. A major difference between defined-contribution and defined-benefit plans is that the former typically make lump-sum distributions to workers who separate prior to retirement. According to Turner (1993), consumption of these preretirement distributions results in a greater loss in retirement income than do losses due to imperfect portability.¹¹

Estimates based on the 1988 May Current Population Survey showed that 8.5 million American workers reported a lump-sum distribution from a previous pension plan, averaging \$8,300 in 1988 dollars (Piacentini 1990). Piacentini reported that only 11 percent rolled the entire sum over into a tax-qualified retirement plan, while 40 percent reported consuming at least a part of the distribution.

In Canada, defined-contribution plans have been less important, so presumably preretirement distributions have been quantitatively less significant. However, the 1987 Ontario Pension Benefits Act allowed separated workers to receive distributions from defined benefit plans. To make sure that these assets were used for income support in retirement, the law generally requires that vested benefits be locked in (Conklin 1990). There is no corresponding requirement that distributions in the United States be placed in another pension savings vehicle. However, since 1987, assets not rolled over into another tax-qualified retirement plan are subject to a 10 percent excise tax.

Many pension analysts are concerned that the growth in defined-contribution plans combined with the greater likelihood of spending lump-sum distributions will lower retirement income. Samwick and Skinner (1994), however, estimated that reductions in benefits due to consumption of defined-contribution distributions approximately matches portability losses from defined benefit plans. Overall, their results suggest that, under current policy, the substitution of defined-contribution plans will have little effect on retirement income.

Taxation of Pension Benefits

There is general agreement that the long-standing policy of preferential tax treatment has been an important factor in the development of private pensions in Canada and the United States. However, this basic policy has been quietly diluted in the United States since 1982 as the federal government looked for ways to raise revenue without raising tax rates. A more explicit debate over the advisability of pension tax preferences appears to be looming in both countries, reflecting a fundamental tension between the goals of encouraging retirement savings, horizontal tax equity, and limiting revenue loss.

Benefit and contribution ceilings in the United States have been lowered on several occasions since 1982. The Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982 lowered limits on the annual benefit a defined-benefit participant could receive, from \$136,425 to \$90,000. The act also reduced the maximum contribution to defined-contribution plans. These limits again were lowered by the Deficit Reduction Act of 1984 and the Tax Reform Act of 1986. A limit on compensation that could be used for benefit calculation became effective in 1989 and was reduced from \$235,000 to \$150,000 by the Omnibus Budget Reconciliation Act (OBRA) of 1993. Perhaps the most controversial policy shift occurred with OBRA 1987, which limited pension funding to 150 percent of current pension liabilities, independent of contributions needed to fund future benefit promises. This change prevented many plan sponsors from making contributions and, in effect, required that future benefits be funded with after-tax dollars (Ippolito 1991b).

Reduced pension preferences have not been driven by an explicit reappraisal of federal retirement income policy, but instead by a continuous search for additional revenue combined with the perception that pension tax policy disproportionately benefits higher income workers. According to estimates produced by the Joint Committee on Taxation, the annual loss in revenue due to the exclusion of pension contributions and earnings was \$56.5 billion in FY 1993, the largest of the so-called "tax expenditures." This figure has made pensions an enticing target for revenue enhancement, especially when a claim can be made that taxing pensions both raises revenue and improves horizontal equity.¹²

Many analysts have become concerned that retirement income policy has become too focused on short-run budgetary concerns, and that an explicit comparison of the costs and benefits of pension tax policy is overdue (Paine 1993). Two fundamental questions would be addressed by such a debate: Do the gains in private pension coverage and benefits justify the revenue loss? Are the benefits of current policy distributed too unfairly?

This explicit debate over pension tax policy is now being joined. Munnell (1991, 1992) argued that private pension coverage is too limited to justify favorable tax treatment, and she recommended taxing pension earnings or assets. Gravelle (1993) also criticized pension tax expenditures for disproportionately benefiting high-income individuals.

These criticisms have been challenged, however. For example, Goodfellow and Schieber (1993) and Salisbury (1993) argued that private pension coverage was never intended to be universal but must be evaluating according to its contribution to "three-legged" stool. Schieber and Goodfellow also argued that the bulk of pension tax expenditures accrue to middle-income households and that the progressivity of the entire retirement income system, including the Social Security system, should be considered.

A similar debate proceeded in Canada. During the "Great Pension Debate," some labor groups took the position that private pensions were fundamentally flawed due to incomplete coverage, nonportability, and the lack of indexed benefits. They argued that augmenting public pensions is more effective strategy for delivering retirement income. The federal and provincial governments elected, instead, to strengthen private pensions and individual retirement saving.

Recent changes in tax policy towards pensions in Canada have taken a much different direction than in the United States. The 1990 tax reforms were the result of an explicit debate over the adequacy of retirement income and the role of tax policy in encouraging private pensions (Horner and Poddar 1992). In other words, changes in tax policy have been less piecemeal and ad hoc than they have been in the United States. The basic approach was to set a consistent overall limit on contributions and benefits for each individual, regardless of whether they were covered by a defined-benefit, money-purchase, or individual savings plan. This integrated limit establishes a target benefit eligible

for tax assistance, equal to an annual benefit limit of 18 percent of earnings up to a maximum of Can\$15,500. Workers who accrue benefits below this limit in a defined-benefit plan or money-purchase plan may contribute the difference to a RRSP. Thus, workers who do not participate in an occupational pension plan may contribute Can\$15,500 to a RRSP.

Some Canadian pension specialists are concerned that the new tax rules, designed to put money-purchase and RRSP plans on an equal footing with defined-benefit plans have, in conjunction with the cost of new regulations, created a disadvantage for defined-benefit plans (Hirst 1992). It must be kept in mind, however, that benefit limits still are much lower in Canada than in the United States. As a result, horizontal equity arguments for taxing pensions have less force in Canada.

Another important difference is that Canada has not adopted ad hoc limits on funding, comparable to the 150 percent rule of OBRA 1987. This represented a fundamental change in policy, for the sole purpose of raising revenue. The full-funding limit is difficult to justify on equity or efficiency grounds.

The debate over taxation of pensions apparently has begun in Canada. The 1995 budget lowered contribution limits to reduce revenue loss. The government has established the principle of limiting tax assistance to earnings up to 2.5 times the average wage. A proposal to tax investment earnings of pension funds was considered but rejected.

The Effect of Reducing Pension Tax Preferences. The question of whether or not the benefits of expanded pension coverage justify the revenue loss from pension tax preferences is very complex. What is the effect of favorable tax treatment on pension coverage and benefits? If tax preferences were eliminated and pension covered declined, would individual retirement savings make up the difference? How elastic is retirement saving to the after-tax rate of return? Would revenue gained by taxing pensions be used to lower marginal tax rates or expand public pensions? Would taxing pensions make the income tax code and retirement income programs more progressive?

A number of studies cited previously suggest that pension coverage is quite sensitive to its tax price, implying that proposals to tax pension contributions and earnings would reduce coverage. A more direct prediction is made by Woodbury and Huang (1991). They esti-

mated a simultaneous model of wages, health insurance, and pension benefits, and the results allowed them to simulate policy effects of several proposals to tax fringe benefits. Woodbury and Huang estimated that treating pension contributions and health insurance benefits as fully taxable income would have reduced pension coverage by over 60 percent in the simulation period. This simulation suggests that a policy of taxing *only* pensions, not other fringes, would have even greater effects on pension coverage, as workers would substitute health insurance for pension coverage.

The case that tax incentives matter for the private pension system is strong, but whether a decline in private pension coverage would lower retirement saving is theoretically ambiguous. Empirical estimates, however, suggest that the trade-off between pension and non-pension saving is less than dollar-for-dollar (Munnell and Yohn 1990). Ippolito (1986) estimated that at least one-quarter of pension contributions represents new saving (see also VanderHei 1992). The result hinges, in part, on whether savings has a positive interest elasticity. Several studies have examined the effect of changes in IRA limits in the United States on aggregate saving. Some found that a substantial amount of contributions were simply substitutions of other forms of savings (Gravelle 1991). However, studies by Venti and Wise (1990) and Carroll and Summers (1987) suggested that IRAs did increase net savings. Carroll and Summers estimated savings equations for the United States and Canada in an attempt to explain why Canadian personal savings rates increased relative to the United States beginning in the mid 1970s. The availability of RRSPs in Canada was found to be a statistically significant factor in the divergence of savings rates.

The impact of changes in tax policy on retirement saving depends crucially upon how the public pension system responds. It is always possible, as some have recommended, to expand the public retirement system to counter any loss in private retirement savings. Private pension advocates argue, in contrast, that one of its principle merits is to reduce pressure on public pensions (Paine 1993). The OASI trust fund in the United States is projected to face significant shortfalls as the baby boom generation begins drawing benefits, and increasing public pension generosity seems unlikely.

The equity effect of taxing pensions is also complicated. Given the patterns of coverage and progressive income tax rates in both coun-

tries, a disproportionate share of the pension tax expenditure accrues to high-income families,¹³ but the treatment of pensions is only one factor in the progressivity of the tax code and retirement policies. Elimination of pension tax preferences may lead to pressure to reduce the progressivity of the tax code in other areas. Further, public pensions in both countries increase the progressivity of the total retirement income system. Estimates by Goodfellow and Schieber (1993) suggest that the higher share of pension tax expenditures is more than offset by a less than fair return on Social Security payroll taxes for high-wage workers. The redistributive nature of public pensions may reflect the disproportionate private pension benefits of high-income workers.

Evidence on Effects of the 1980s Changes. The reduction in benefit and contribution limits in the United States could be described as “nibbling at the edges” of the pension tax preference. The basic policy remains intact, so it is unlikely that tax policy changes directly reduced coverage during the 1980s.¹⁴ Many have argued, however, that frequent changes in tax rules added to the complexity of administering defined-benefit plans and contributed to a shift towards defined-contribution and 401(k) plans.¹⁵ As stated by Utgoff (1991), “It is often difficult for nonspecialists to comprehend just how complex our pension laws have become . . . nondiscrimination laws in particular.” Frequent changes in nondiscrimination rules appear to have been especially burdensome for small employers, among whom the shift away from defined-benefit pensions has been the greatest.

The full-funding limit established by OBRA 1987 also has created concern. Ippolito (1991b) estimated that the 150 percent funding limit establishes, in effect, an excise tax on defined-benefit assets of 3 to 10 percent per year, with a nominal interest rate of 10 percent. The constraint is greatest for companies with a younger workforce and when nominal interest rates are higher. Ippolito estimated that, had this limit been applied since 1974, funding ratios, especially for growing firms, would have been dramatically reduced. It seems clear that this provision has significantly reduced pension funding. A study by the U.S. Department of the Treasury found that half of all defined-benefit plan assets were affected by the limit.

Mandatory Inflation Protection

The issues discussed so far have been prominent in both countries. The debate over indexing private pension benefits, however, has occurred almost exclusively in Canada. The erosion of benefits by inflation was seen the principal weakness of private pensions by many participants in the Canadian pension debate. Before inflation subsided, there was widespread concern that, if private pensions were unable to guarantee some form of indexation, the public pension system would expand and eclipse private pensions. In response to this challenge, a series of studies were undertaken and proposals issued.¹⁶ Public debate on indexing private pension benefits in the United States was minimal, in contrast, even before inflation declined.

Canadian Proposals and Background Analysis. A 1978 pension reform study for the Quebec government first proposed that “surplus” investment earnings be used to fund increases in benefits. This “excess earnings” approach was adopted by several other studies. The following year the Economic Council of Canada recommended that the federal government assume the risk of variations in inflation by offering price-indexed annuities to pension funds. The 1980 Report of the Royal Commission on the Status of Pensions in Ontario, however, rejected various proposals to mandate inflation protection, arguing that indexing would interfere with the more important goal of expanding pension coverage. A short time later, four commissions proposed that indexing be mandatory and favorably evaluated the excess earnings proposal.

Not all reports supported mandatory indexing. Business groups were critical of what they saw as an open-ended obligation. A report by the Ontario Economic Council (1984) criticized the excess earnings approach. Growing doubts about the excess earnings approach caused subsequent study groups to favor a partial or capped CPI adjustment. For example, an Ontario White Paper proposed a formula of 60 percent of CPI.

This flurry of activity had little ultimate effect on policy. Although the Ontario government is committed, in principle, to inflation protection for private pensions, inflation adjustments are not mandatory in any province.

Much of the economic analysis of mandatory indexing proposals in Canada was done by James Pesando (1984a). A series of papers focused on the conditions under which pension funds could provide inflation protection and remain viable. In his evaluation of the federal government's proposals, he noted that a portfolio composed entirely of Treasury bills could approximate a portfolio of index bonds, allowing sponsors to promise index benefits without assuming inflation risk. Pesando suggested that the general absence of such lower return portfolios, however, suggests that employees may be unwilling to pay the market price for avoiding inflation risk.

In this and a later study (Pesando 1988), he was especially critical of the excess earnings approach, which pegs inflation adjustments to current bond interest rates, not yields. Under this approach, when inflation and nominal interest rates rise, pension funds are required to increase benefits, even though their value has declined. Although pension funds could avoid inflation risk by holding only Treasury bills, the real interest rate required by the excess earnings proposal was well above the equilibrium rate for such a riskless portfolio.

What is the Nature of the Pension Contract? The debate over mandatory indexing goes to the heart of a question that is fundamental for pension policy. What are the implicit promises of defined-benefit sponsors to employees? Is there an implicit promise of a real retirement benefit? While fewer than 5 percent of plan sponsors promise automatic indexation, evidence suggests that ad hoc post-retirement benefit increases, which sponsors are under no legal obligation to provide, are widespread but incomplete. Allen, Clark, and Sumner (1986) found that 75 percent of retirees in the United States received such an adjustment during the 1970s; however, the average increase was only about 40 percent of price increases over the period. A later study by Allen, Clark, and McDermid (1992) found that fewer plans raised benefits during the 1980s, but inflation adjustment was more complete. Conklin (1990) reported that ad hoc adjustments also were common in Canada and cited a study suggesting that the average increase offset about one-fourth of price increases between 1977 and 1986.

Thus, the evidence is not consistent with a contract that guarantees real pension benefits. Periodic adjustments are sufficiently common, however, to suggest some kind of implicit agreement. Pesando

(1984b) and Pesando and Hyatt (1992) have argued against the traditional notion that the risk of pension fund performance is borne entirely by shareholders. They suggest an implicit contract model in which workers and, presumably, retirees share in favorable and unfavorable investment performance. The finding that benefits are not fully indexed reflects the sharing by workers in a decline in the performance of the pension fund.

Evidence for this type of contract is mixed, however. The studies by Allen, Clark, and McDermed (1992, 1993) both find that larger firms are more likely to provide ad hoc adjustments, consistent with the contract model. However, they found no evidence that financial performance altered the likelihood that plans would provide benefit increases during the 1980s. In addition, strong pension fund performance during the 1980s should have made adjustments more, rather than less, likely. Pesando and Hyatt (1992), on the other hand, presented informal evidence and case studies to suggest that employees are negatively affected by adverse plan performance in Canada, where sponsors are required to quickly amortize experience deficiencies through increased contributions.

A closely related issue is the appropriate discount rate for valuing pension liabilities. If the beneficiaries bear no investment risk, the risk-free rate is appropriate, regardless of the assets held by the fund. If the implicit contract calls for workers to share in investment risk, the appropriate rate is instead related to the risk characteristics of the fund. Petersen (1994) attempted to infer from the discount rate chosen by plan sponsors the extent to which risk is born by workers. Given legal limitations on the choice of discount rates in the United States, an analysis of rates used by Canadian actuaries may be more instructive, however.

Allen, Clark, and McDermed (1992) raised the possibility that slowing benefit increases during the 1980s may reflect increased propensity to renege on the implicit contract, by terminating pension plans and acquiring surplus assets. Ownership of surplus assets is another aspect of the implicit pension contract, which is a matter of legal and public policy interest in both countries. Recent legislation in the United States has taken the view that pension surpluses belong to workers and has imposed large penalties on sponsors who terminated plans with surplus assets. The view that surplus assets are owned by

plan participants is consistent with the view that workers share in the investment risk of pension funds. Until recently, plan sponsors in Canada could more easily acquire surplus funds. However, the Pension Commission of Ontario has enforced a freeze on surplus assets.

Why is There Less Concern about Indexing in the United States?

A striking difference between the pension policy debate in Canada and the United States is has been the attention paid to mandatory indexing. Inflation protection was perhaps the central private pension policy issue in Canada through the mid 1990s. Indexing of private pensions has drawn far less interest in the United States. Given the similarities of systems and other policy concerns, what explains the difference in emphasis on indexing?

A likely candidate is the conflict between encouraging retirement income and minimizing federal revenue losses. This policy trade-off exists in both countries and helps explain why indexing proposals have not been implemented in Canada. Short-run revenue concerns appear to have been more powerful in the United States, however. Utgoff (1991) described how *any* policy to expand private pension benefits increases the reported pension tax expenditures and, under current budget rules, requires a spending offset or revenue increase. During the 1980s, the budget rules were informal but no less binding. In short, the U.S. federal budget deficit dominated any pension-related debates.

Second, the "Great Pension Debate" in Canada was largely over the adequacy of retirement income, and benefit erosion is clearly a key factor. The United States has experienced no similar fundamental debate over retirement income policy probably, again, due to the immediacy of the revenue concerns.

A reason cited by the Canadian Task Force on Inflation Protection is that most of the attention in the United States on retiree benefits was focused on health care insurance. More recently, of course, the health insurance debate has dominated any policy analysis of employee benefit issues.

Consider also that, at the time that mandatory indexing was being debated in Canada, cost-of-living increases for federal workers in the United States were being reduced in order to minimize the budget deficit, and various proposals were circulating which would limit indexing of social security benefits. Automatic indexing—of retirement benefits

or the tax code—was viewed quite negatively by much of Congress, as part of the entitlement “problem.” No doubt contributing to this perception was the “double-indexing” of Social Security benefits during the 1970s, which contributed to the solvency problems of the OASI trust fund and created very unpleasant transitional problems.

Finally, comparison of the policy debate in both countries gives the impression that there is greater consensus in Canada for an active government role in guaranteeing retirement income. A frequently voiced concern in Canada was that, unless private pensions could do a better job of providing inflation protection, indexed government pensions would be likely to expand. In the United States, expansion of the Social Security to overcome perceived deficiencies in private pensions seems quite unlikely. If anything, private pensions are seen as reducing the pressure to increase Social Security benefits.

CONCLUSIONS

The policy stance of the governments of Canada and the United States towards private pensions is similar. Both view private pensions as a primary source of retirement income, along with public pensions and individual saving. Tax and regulatory policies are fundamentally the same in each country. There are small, but important, differences however. One of the most important is that contribution limits are integrated and lower in Canada than they are in the United States. The integrated limits establish a greater ability to save for retirement outside of an employer-sponsored plan in Canada. The lower overall limits in Canada also have resulted in an absence of nondiscrimination rules; the complexity of these rules is cited as an important factor in declining defined-benefit coverage in the United States, especially among small employers.

The most significant portability policy difference is that preretirement distributions are locked-in in Canada, whereas they only are subject to a penalty tax in the United States. This is important because the consumption of lump-sum distributions has created fears that the shift towards defined-contribution plans threatens basic retirement income.

Canada and the United States share most current pension policy issues. The most basic policy issue facing both countries over the next decade is pension coverage and, in particular, the appropriate role of tax and regulatory policy. There is a fundamental tension in both countries between the goals of encouraging private pension coverage and benefits and minimizing revenue losses. This conflict already has produced significant effects on pension outcomes in the United States. A more explicit debate on fundamental pension tax policy appears to be developing in Canada and the United States. In both countries, the sides will be drawn between those who believe private pensions are fundamentally flawed and favor the expansion of public pensions, and advocates who view private pensions as an essential leg of the retirement "stool." Such an explicit debate would be welcome, especially in the United States, where recent tax policy has been driven by short-run revenue concerns with little regard to impacts on the retirement income system.

The two most important trends in coverage in the United States are a decline in overall private sector coverage, especially for young males, and the dramatic fall in the relative share of coverage provided by defined-benefit plans. An unresolved question is whether or not Canada is experiencing similar trends. There has not been an overall decline in coverage rates in Canada; however, current data cannot address whether there has been a similar large drop in private sector coverage for young males, a drop that has been driving the falling coverage in the United States. A comparison of coverage trends for young males would be helpful in evaluating the importance of policy changes versus employment shifts since there have been differences in the latter between the two countries.

A time-series for private sector, defined-benefit coverage is not available in Canada; however, it is clear that coverage shifts have been much greater in the United States. Again, a comparative analysis may shed light on the causes of this trend. A theory of the decline in defined-benefit coverage is that it reflects shifts in employment away from large, unionized, manufacturing firms. However, Canada has had similar shifts, with the exception that unionization rates have fallen less. If the shift to defined-contribution plans has been primarily a result of changes in tax and regulatory policies, the United States experience may be relevant in Canada. There is concern that recent regula-

tory changes in conjunction with expanded contribution limits for RRSPs may cause a similar drop in defined-benefit coverage there.

Finally, my overall impression is that there is a greater consensus for regulation of pension outcomes in Canada. Canada had earlier and stricter vesting standards than the United States and does not allow workers to consume vested benefits. Most recently, the seriousness of the debate over mandatory indexing stands in contrast to the lack of interest in regulating inflation protection in the United States.

Notes

The author wishes to thank Keith Horner for many helpful comments on an earlier draft of this paper.

1. The most extensive survey of early pension coverage combined data from the United States and Canada (Latimer 1932). It is likely that early trends were similar in both countries, however. According to Ezra (1983), the introduction of pensions in Canada resulted primarily from decisions of firms headquartered in the United States.
2. Contributions to these "overfunded" plans are subject to a 10 percent excise tax.
3. While most mandatory contributions are not deductible, interest earnings do accumulate tax-free.
4. However, each working spouse may make up to a \$2,000 nondeductible contribution, and the investment earnings are not subject to taxation.
5. Cross-section coverage rates understate the percentage of workers who earn credit for pension benefits at some point in their career, due to the typical life cycle pattern of coverage. Tabulations reported by Goodfellow and Schieber (1993) tabulations from the March 1991 Current Population Survey showed that 61 percent of all persons aged 45 to 59, whether working or not, were either participating or receiving benefits from a private pension plan in the United States.
6. Estimates of private sector coverage rates can vary significantly in each country. One reason is different databases. The Frenken and Maser estimate is based upon the 1989 Labour Market Activity Survey. Other coverage rates estimates for Canada are derived from a biennial plan sponsor survey. The latter, however, do not allow an estimate of private sector coverage. In the United States, several surveys and methodologies are used to calculate coverage rates, and the estimates differ by definition of coverage, public versus private sector, and other factors. See Doescher (1994) for a comprehensive discussion and comparison of differences in pension coverage statistics in the United States.
7. See Sayeed (1984) for a review of pension commission recommendations. Only the Canadian Labour Congress opposed expanded private coverage, favoring expansion of public pensions instead.

8. The extent to which coverage has declined in the United States is a matter of some debate. Other surveys have shown a larger drop in coverage; for example, see Parsons (1994). In contrast, establishment surveys have indicated constant coverage rates (Beller and Lawrence 1992). In general, comparisons of coverage and trends are quite sensitive to the form of the survey question and population definition. See Doescher (1994) for a review of pension coverage surveys in the United States. Since different surveys yield different results, even with the United States, international comparisons of coverage rates should be undertaken with great care.
9. Turner and Dailey (1990) estimate that Canadian private sector coverage rates were unchanged between 1970 and 1988. Their figure of 28 percent coverage, however, is well below the estimate of 39 percent reported by Frenken and Maser (1992).
10. However, as noted by Ippolito (1991a), a steepened career wage is a less efficient vehicle for delivering deferred compensation incentives than is a pension.
11. Samwick and Skinner (1994) pointed out, however, that workers may use these distributions to purchase consumer durables or to pay down debt, which will increase retirement resources. Workers obtain no benefit from portability losses.
12. For example, during the debate on TEFRA, Congressional staff generally referred to the reduction in compensation limits as "loophole closers."
13. However, as pointed out by Schieber (1990), the share of tax expenditures always is more skewed than the share of pension benefits, given that higher income families face greater marginal tax rates. A dollar of benefits provides a larger tax benefit to families with greater tax liability. He also estimated that more than half of the benefits accrue to families with incomes less than \$50,000 per year.
14. However, as noted above, the decline in marginal income tax rates may have had an important effect.
15. As discussed above, the growing popularity of 401(k) plans may have been an important factor in declining coverage. To the extent that tax and regulatory changes encouraged the adoption of these plans, these policies have indirectly reduced pension coverage.
16. A chronology of recommendations from no fewer than 12 study groups is provided by the Ontario Economic Council (1988).

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